

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)
)
Connect America Fund) WC Docket No. 10-90
)

To: The Commission

**REPLY OF HUGHES NETWORK SYSTEMS, LLC
TO OPPOSITIONS AND COMMENTS ON PETITIONS
FOR RECONSIDERATION**

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Hughes Network Systems, LLC (“Hughes”) files this reply to the oppositions¹ to Hughes’s Petition for Clarification, or in the Alternative, Reconsideration² of the *Metrics Order*³ and to the comments supportive of Viasat’s petition for reconsideration,⁴ which Hughes opposed.⁵

⁵ Opposition of Hughes Network Systems LLC to Petition for Reconsideration by Viasat, Inc., WC Docket No. 10-90 (filed Sept. 18, 2018), <https://ecfsapi.fcc.gov/file/110743558115/Hughes%20Opp%20to%20Viasat%20PFR%20Metric%20Order.pdf> (“Hughes Opposition”)

I. INTRODUCTION AND SUMMARY

Hughes’s Petition and its Opposition both seek to protect a fundamental principle, guaranteed by statute for spectrum auctions and recognized by the Commission for universal service auctions: When the Commission uses a competitive process to allocate resources, potential bidders should know all their significant rights and obligations before the auction begins. When rights and obligations change after bidding has concluded, the auction process loses its ability to allocate resources efficiently.⁶

In this case, the *Metrics Order* made a significant change to the obligations and requirements for high-latency bidders by modifying the ITU-T P.800 protocol for showing a Mean Opinion Score (“MOS”) for voice quality of 4 or better by requiring use of a modified version of the “conversation-opinion test” and eliminating the option to use the other tests prescribed in the protocol.⁷ This change calls into question satellite broadband providers’ ability to participate in any auction to which it applies (a computational tool also released by the ITU-T indicates that a provider with 600 ms round-trip latency—which satellite-based providers unavoidably experience due to the distance from the earth to the satellite—can achieve at best a MOS of 3.72 using the conversation-opinion test). The *Metrics Order* was released well after the bidding had concluded in the auction for Commission funding through the New NY Broadband Program. Because of its significant impact on bidders’ expectations and obligations, the *Metrics Order*’s limitations on the use of the P.800 protocol should not be applied to

⁶ See, e.g., *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 31 FC Rcd 5949, 5958 ¶ 18 (2016) (“2016 CAF Order”) (“Competitive bidding is likely to be more efficient if potential bidders know what their performance standards will be before bids are made.”).

⁷ *Metrics Order* at ¶ 45.

recipients of support already awarded in conjunction with the New York program, which was held before the release of *Metrics Order*. This determination will not undermine the provision of high-quality voice service to customers in supported areas because the Commission's rules to protect voice quality—the 750 ms latency limit and the requirement to demonstrate a MOS of 4 or greater via any means permitted in the ITU-T P.800 protocol—remain in force. Hughes's Petition therefore should be granted.

Unlike the New York auction, the Commission's nationwide CAF auction occurred *after* the *Metrics Order* was released, and that auction had closed. To support the settled expectations of CAF auction bidders, the Commission should not modify the substantive requirements for latency testing for entities receiving support awarded in the nationwide CAF auction as Viasat requests. To do so, would allow bidders to game the system if they can convince the FCC to change the rules post-auction. ViaSat's Petition therefore should be denied.

To the extent that these important public policy considerations are not enough, enforcement of the *Metrics Order*'s modifications to the P.800 protocol against participants in the New York auction also would be contrary to law. The *Metrics Order*'s determination to modify the P.800 protocol was made on the basis of a record that the Commission itself had found to be inadequate for that purpose. The Commission failed to explain its reversal in course on the adequacy of the record. The application of the *Metrics Order*'s limitations to the P.800 protocol to New York auction participants also would constitute impermissible retroactive rulemaking because it would impose new duties on high-latency New York auction participants and impair the rights that they won at auction.

II. THE COMMISSION SHOULD PROTECT BIDDERS' SETTLED EXPECTATIONS IN SUPPORT AUCTIONS

As Hughes described in its Petition and in its Opposition to Viasat's Petition,⁸ the Commission should act to ensure that bidders in universal service support auctions "know what their performance standards will be before bids are made."⁹ When material performance standards for support recipients shift after bidders have placed bids, bidders' commercial expectations in the auction are upset. As a result, the auction process loses its economic efficiency, and bidders lose faith in the Commission's ability to equitably award support through auctions. The Commission has recognized this, noting that "[c]ompetitive bidding is likely to be more efficient if potential bidders know what their performance standards will be before bids are made."¹⁰

A decision to limit high-latency bidders to the conversational-opinion test portion of the P.800 protocol is unquestionably a material performance standard from the perspective of satellite-based providers. Indeed, it draws into question whether satellite providers are able to participate in the program at all. The ITU-T has produced a computational model for estimating the predicted conversation-test MOS score of networks with various characteristics.¹¹ Per this

⁸ *Supra* notes 2, 5.

⁹ 2016 CAF Order 31 FC Rcd at 5958 ¶ 18.

¹⁰ 2016 CAF Order, 31 FCC Rcd at 5958 ¶ 18. Analogously, In the spectrum auction context, where the Commission's authority to allocate resources through auctions is provided by statute, the Commission has a statutory obligation to "ensure that potential bidders have adequate time before the auction to familiarize themselves with the specific rules and procedures that will govern the auction." *Motions for Stay of Auction 57 and Requests for Dismissal or Disqualification*, Order, 19 FCC Rcd 20482, 20483 ¶ 2 (WTB 2004), citing 47 U.S.C. § 309(j)(3)(E)(i).

¹¹ *The E-model: A Computational Model for Use in Transmission Planning*, ITU-T G.107 (June 2015) at 15, <https://www.itu.int/rec/T-REC-G.107-201506-I/en>.

ITU-T model, a network with 600 ms of round-trip latency—which is a characteristic of geostationary satellite service given the time necessary for signals to travel back and forth to the satellite at the speed of light—can produce a best-case MOS conversational score of 3.72.¹² Although, at this score, most users are satisfied with the quality of the voice service,¹³ this result would not meet the FCC’s 4.0 threshold MOS score. Given the results of the ITU-T calculation tool, a satellite bidder knowing that that it would be limited to the conversational-testing portion of the P.800 protocol would be assuming enormous risk by bidding in an auction where a MOS score of 4 is required. This is a crucial fact for an auction participant to know prior to the start of an auction.

Bidders in the NY Program auction, however, were not on reasonable notice that their use of the ITU-T P.800 protocol would be limited to the conversational-opinion portion of the test. Bids in the NY auction were accepted between June 6, 2017, and August 15, 2017.¹⁴ At that time, the Commission had established the requirements for high-latency bidders—latency no greater than 750 ms and a showing of a MOS 4 or greater using the ITU-T P.800 protocol¹⁵—and the Commission had given no indication that the ITU-T protocol might be limited or changed. ADTRAN had filed its 2016 petition for reconsideration proposing that the Commission modify

¹² The ITU-T’s E-model calculation tool is available at <https://www.itu.int/ITU-T/studygroups/com12/emodelv1/calcul.php>. Inserting the value “300” in the “mean one-way delay” field and leaving the other default values, which represent a reasonable approximation of good network conditions, generates a conversational MOS score equivalent of 3.72.

¹³ See *E-model*, *supra* note 11, at 16, Table B.1.

¹⁴ *New NY Broadband Program: Phase 3 Request for Proposal Guidelines* (March 20, 2017) at 46-47, https://nysbroadband.ny.gov/sites/default/files/rfp_guidelines_phase_3.pdf.

¹⁵ See *Connect America Fund et al.*, Order, 32 FCC Rcd 968, 986-87 ¶ 50 (2017).

the requirements for demonstrating the MOS score,¹⁶ but the Commission had done nothing more with it than unceremoniously seek comment on it,¹⁷ and ADTRAN’s proposal did not undermine the validity of the rules then in place.¹⁸ Even for a party paying close attention to ADTRAN’s petition, its odds did not appear favorable: The Commission had stated its intention to conduct a technology-neutral CAF bidding process¹⁹ and had insisted that “satellite providers must be given the opportunity to compete for Connect America support that is allocated in partnership with New York’s program,”²⁰ yet as noted above the well-known ITU-T computational model G.107 suggested that ADTRAN’s proposed change would eliminate satellite broadband providers from the program.²¹ The Commission’s reconsideration order indicating that the Commission might actually consider a modified version of ADTRAN’s

¹⁶ ADTRAN, Inc., Petition for Clarification or Reconsideration, WC Docket No. 10-90 (filed July 5, 2016), <https://ecfsapi.fcc.gov/file/10705196493826/CAF%20Bidding%20Order%20Petition%20for%20Clarif%20or%20Recon%207-5-16%20FINAL.pdf>.

¹⁷ *Petitions for Reconsideration of Action in Rulemaking Proceedings*, Public Notice, Report No. 3050 (rel. Aug. 12, 2016).

¹⁸ See, e.g., 47 C.F.R. § 1.429(k) (“Without special order of the Commission, the filing of a petition for reconsideration shall not excuse any person from complying with any rule or operate in any manner to stay or postpone its enforcement.”).

¹⁹ *2016 CAF Order*, 31 FC Rcd 5949, 5956 ¶ 14.

²⁰ *Connect America Fund et al.*, 32 FCC Rcd 968, 983 ¶ 42 (2017) (“*New York Waiver Order*”).

²¹ The well-qualified Commission engineers working on the *Metrics Order*—who recently were awarded the Excellence in Engineering Analysis Award for this work—certainly were aware of the G.107 computational tool as well. See Press Release, FCC, *FCC Announces Excellence in Economics, Engineering Award Winners* (Oct. 23, 2018), <https://docs.fcc.gov/public/attachments/DOC-354705A1.pdf>.

proposal was not issued until January 31, 2018,²² fully five and a half months after bidding in New York had closed.

ADTRAN and the Fiber Provider Associations argue that participants in the New York auction should have known that standards set for the broader CAF program also would apply to the New York program. When the New York auction occurred, however, the Commission had already set the program rules for the CAF auction.²³ New York program participants were entitled to rely on those rules. It is not reasonable to expect that bidders would risk large sums of money bidding to provide service in particular areas based on requirements that could change in material ways in the future, as would be the case here if the Commission applies the *Metrics Order*'s modifications to the P.800 protocol to New York auction participants.

As a result, the Commission would upset bidders material settled expectations if it applied the *Metrics Order*'s modifications to the P.800 protocol to bidders in the New York auction. Hughes bid in the high-latency category in the New York auction, and was awarded support in a number of areas, with the accompanying obligations to provide service in those areas consistent with the program's requirements.

By contrast, bidders in the nationwide CAF-II auction had clear notice that the parameters in the P.800 protocol were in play. The Commission so stated in its reconsideration order in January 2018,²⁴ fully seven months before the nationwide CAF-II auction began, and the

²² *Connect America Fund et al.*, Order on Reconsideration, 33 FCC Rcd 1380 (2018).

²³ *See generally* 2016 CAF Order.

²⁴ *Id.* at 1386 ¶ 15-16.

Metrics Order itself was released two weeks before nationwide CAF-II auction bidding began (though short-form applications had already been filed).²⁵

Indeed, faced with this knowledge in the nationwide CAF-II auction, Hughes made the business decision not to bid in the auction. Although Hughes had submitted a short-form application and was qualified to bid in the auction,²⁶ Hughes refrained from submitting bids solely because of the *Metrics Order*'s decision to restrict the use of the P.800 protocol.

Another geostationary satellite provider, Viasat, made a different business decision and bid in the auction, winning a number of licenses.²⁷ Viasat, in its Petition, seeks relief from a number of aspects of the latency testing protocols adopted in the *Metrics Order* and in place at the time CAF-II bidding occurred.²⁸ ADTRAN supports Viasat in some of these requests.²⁹

For the same reason that Hughes's petition must be granted, Viasat's petition must be denied. Auction participants must have certainty as to the applicable material requirements at the time bids are placed. If material standards are modified after auction participants have made their bidding decisions, the entire foundation of the auction results is undermined. Moreover,

²⁵ See *Connect America Fund Phase II Auction Scheduled for July 24, 2018; Notice and Filing Requirements and Other Procedures for Auction 903*, Public Notice, FCC 18-6 (rel. Feb 1, 2018).

²⁶ *220 Applicants Qualified To Bid In The Connect America Fund Phase II Auction (Auction 903), Bidding To Begin On July 24, 2018*, Public Notice, DA 18-658 (rel. June 25, 2018).

²⁷ *Connect America Fund Phase II Auction (Auction 903) Closes, Winning Bidders Announced FCC, Form 683 Due October 15, 2018*, Public Notice, DA 18-887 (rel. Aug. 28, 2018).

²⁸ Viasat, Inc., Petition for Reconsideration, WC Docket No. 10-90, (filed Sept. 19, 2018), [https://ecfsapi.fcc.gov/file/10920727326915/Viasat%20PFR%20\(9-19-18\).pdf](https://ecfsapi.fcc.gov/file/10920727326915/Viasat%20PFR%20(9-19-18).pdf).

²⁹ ADTRAN Comments at 8-9.

prospective bidders in future auctions lose faith in the Commission's ability to conduct fair support auctions.

To protect this bedrock principle, the Commission should grant Hughes's requested clarification that the *Metrics Order* does not apply to support awarded through the NY Program auction and deny Viasat's Petition for relief from aspects of the latency testing protocol.

III. THE COMMISSION DOES NOT NEED TO UNDERMINE AUCTION BIDDERS' EXPECTATIONS IN ORDER TO PRESERVE ITS VOICE SERVICE QUALITY STANDARDS

ADTRAN and the Fiber Provider Associations cloak their requests that the Commission deny Hughes's Petition in warnings about the importance of protecting rural consumers' access to high-quality voice service,³⁰ but this is a red herring. The Commission established clear standards to ensure that all CAF recipients have access to high-quality voice service, and those standards are not at issue in this proceeding.

Specifically, with respect to high-latency providers, the Commission required that latency measurements not exceed 750 ms and that the provider demonstrate a MOS of 4 or greater using the ITU-T P.800 standard.³¹ The Commission set this rule for the CAF-II auction generally in 2016³² and reiterated that it applies to the NY CAF auction in 2017.³³ That standard, adopted by the full Commission, unquestionably applies to NY CAF recipients, including Hughes, and ensures that consumers have access to high-quality voice services.³⁴

³⁰ ADTRAN Comments at 2; Fiber Provider Association Comments at 3-6.

³¹ *2016 CAF Order*, 31 FCC Rcd 5949.

³² *Id.*

³³ *Connect America Fund et al.*, 32 FCC Rcd 968, 986-87 ¶ 50 & n.135.

³⁴ *Id.*

The only question in this proceeding is whether the Bureaus' modifications to the ITU-T P.800 testing protocols, adopted well after the completion of the NY CAF auction, apply to NY CAF recipients. These testing protocols are not necessary to ensure access to high-quality voice services. The 750 ms latency limit and the MOS 4 requirement itself are the Commission's safeguards on the quality of voice service.³⁵ Application of the Bureaus' modifications to the ITU-T P.800 standard is not necessary to ensure that these conditions are fulfilled.

In this regard, both ADTRAN and the Fiber Provider Associations suggest that application of other testing protocols in the P.800 standard, including the listening test, is inappropriate for a two-way service such as voice,³⁶ but this is incorrect. The ITU-T P.800 standard specifically states that the "results of listening-only tests can be applied ... to the prediction of the assessment for conversation conducted over a two-way system,"³⁷ subject to the proviso that "the effects of the following additional factors are duly taken into account: talking degradation (sidetone and echo) and conversation degradation (propagation time and mutilation of speech by the action of voice-operated devices)."³⁸ There is no reason that these factors cannot be taken account in a listening-opinion MOS test in the CAF context.

Real-world experience also shows that satellite voice customers are satisfied with their voice service. As Hughes has previously pointed out to the Commission, since the deployment of its next-generation Jupiter 2 satellite in March 2017, churn levels for customers subscribing to

³⁵ *2016 CAF Order*, 31 FC Rcd at 5962 ¶ 33.

³⁶ ADTRAN Comments at 4; Fiber Provider Association Comments at 5-6.

³⁷ ITU-T P.800, *Methods for Subjective Determination of Transmission Quality* (Aug. 1996), at 4.

³⁸ *Id.*

both broadband and Hughes’s satellite-based VoIP product have been even lower than churn levels for customers for Hughes’s broadband-only customers.³⁹

In sum, it is not necessary for the Commission to set the dangerous precedent of changing the material obligations on auction participants after the auction has closed in order to protect the quality of voice service. The *Metrics Order*’s modification to the MOS testing protocols should not be applied to NY CAF auction winners.

IV. NO FILER REFUTES HUGHES’S SHOWING THAT APPLICATION OF THE *METRICS ORDER*’S MODIFICATIONS TO THE ITU-T P.800 LATENCY MEASUREMENT STANDARD TO NY CAF RECIPIENTS WOULD BE UNLAWFUL

In its Petition, Hughes demonstrated that—in addition to being bad policy—applying the *Metrics Order*’s modifications to the ITU-T P.800 testing protocols to NY CAF recipients would represent a violation of the Administrative Procedure Act, an unexplained change in course, and impermissible retroactive rulemaking.⁴⁰ None of the commenters succeed in refuting these points.

Hughes showed in its Petition that the full Commission decided in January 2018 that the record was insufficient to support a decision on whether to select one portion of the P.800 standard over another.⁴¹ In response, ADTRAN states that “while the record on this issue is ‘sparse,’ it is certainly adequate to support the Commission’s decision to require a conversational-opinion test.”⁴² ADTRAN’s opinion on this matter is irrelevant, however,

³⁹ Letter from L. Charles Keller, Counsel to Hughes, to Marlene H. Dortch, FCC, WC Docket No. 10-90 (filed Jan. 18, 2018) at 1.

⁴⁰ Hughes Petition at 6.

⁴¹ *Id.* at 4-5.

⁴² ADTRAN Comments at 6.

because the full Commission expressly disagreed in January 2018: “We find that there is insufficient information in the record to specify which of the ITU’s recommended options applicants should be prepared to use to demonstrate an MOS of four or higher.”⁴³ No one has refuted Hughes’s observation that no new information on the issue entered the record between this Commission statement in January 2018 and the Bureaus’ Order in July 2018. The Bureaus, moreover, are bound by the Commission’s conclusion on this matter. As a result, the *Metrics Order*’s decision to limit high-latency bidders’ ability to use part of the P.800 protocol violated the APA’s proscription against agency actions that are “unsupported by substantial evidence”⁴⁴ and precedent setting aside agency actions as arbitrary and capricious if the action “is not supported by substantial evidence, or the agency has made a clear error in judgment.”⁴⁵ For this reason, Hughes’s Petition must be granted.

Hughes also observed that the agency’s shift in position on the adequacy of the record to decide this issue lacked the explanation required for such a change in course.⁴⁶ No party even attempted to refute this showing. Thus, on this basis, too, Hughes’s Petition must be granted.

In response to Hughes’s demonstration that the application of the *Metrics Order*’s modification of the P.800 protocol to NY auction participants would constitute unlawful retroactive rulemaking,⁴⁷ ADTRAN first asserts that the *Metrics Order* is not a rule at all, but

⁴³ *Connect America Fund et al.*, 33 FCC Rcd 1380, 1386 ¶ 18.

⁴⁴ 5 U.S.C. § 706(2)(a), (e).

⁴⁵ *AT&T Corp. v. F.C.C.*, 220 F.3d 607, 616 (D.C. Cir. 2000). *See also Massachusetts v. EPA*, 549 U.S. 497 (2007).

⁴⁶ Hughes Petition at 4-5.

⁴⁷ *Id.* at 6.

“merely clarifies” the application of the P.800 standard.⁴⁸ ADTRAN is incorrect. The Commission’s modification of the P.800 protocol as applied to NY auction participants is in fact a “substantive” or “legislative” rule for purposes of the Administrative Procedure Act (“APA”).⁴⁹ The Supreme Court has held that a “characteristic inherent in ... a ‘substantive rule’” is that it “affect[s] individual rights and obligations.”⁵⁰ The *Metrics Order*’s modifications to the P.800 protocol unquestionably affected bidders’ rights and obligations because it made it substantially more difficult—and perhaps impossible—for satellite providers to show that they meet the Commission-imposed obligation to demonstrate a MOS 4 or better, potentially affecting their right to continue to receive support. Another key characteristic of legislative rules is that they have a “future effect” on the party before the agency.⁵¹ In this regard, the D.C. Circuit has held that establishing procedures or requirements for participants in agency programs cause “future effect[s]” and thus constitute rules “by any other name.”⁵² The *Metrics Order* established an

⁴⁸ ADTRAN Comments at 7. ADTRAN does not cite to any authority or provide any analysis to support its assertion that the *Metrics Order* is not a substantive rule but merely a clarification of the P.800 standard.

⁴⁹ See generally 5 U.S.C. § 553(b)(A); see also, e.g., *Perez v. Mortg. Bankers Ass’n*, 135 S.Ct. 1199, 1206 (2015).

⁵⁰ *Chrysler Corp.*, 441 U.S. at 301-302 (“A ‘substantive rule’ is not defined in the APA, and other authoritative sources essentially offer definitions by negative inference. But in *Morton v. Ruiz* ... we noted a characteristic inherent in the concept of a ‘substantive rule.’ We described a substantive rule—or a ‘legislative-type rule’—as one ‘affecting individual rights and obligations.’ This characteristic is an important touchstone for distinguishing those rules that may be ‘binding’ or have the ‘force of law.’” (internal citations omitted; quoting *Morton v. Ruiz*, 415 U.S. 199, 236 (1974)).

⁵¹ See, e.g., *Sugar Cane Growers Coop. v. Veneman*, 289 F.3d 89, 95-97 (D.C. Cir. 2002).

⁵² *Id.* The fact that the new obligation here has retrospective *as well as* prospective effect does not undercut its status as a “rule” for APA purposes. If it did, there could be no doctrine of retroactive rulemaking, because no prescription with any retroactive effect could constitute a rule.

important program procedure and requirement that has a significant future effect on high-latency bidders by limiting their ability to utilize a portion of the Commission-adopted ITU-T P.800 protocol. Finally, courts have held that, while clarification of an existing rule may not constitute a legislative rule, “new rules that work substantive changes in prior regulations,” such as the imposition of “*additional obligations*,” are themselves legislative rules.⁵³ The *Metrics Order* established an additional obligation on high-latency bidders to demonstrate a MOS score of 4 or better using a much more restrictive test than the ITU-T P.800 protocol in its entirety.

ADTRAN argues further that, even if the modifications that the *Metrics Order* made to the P.800 standard constitute a rule, it was not unlawfully retroactive.⁵⁴ ADTRAN begins by correctly citing the standard for unlawful retroactivity, noting among other things that an unlawfully retroactive rule “‘would impair rights a party possessed when he acted ... or impose new duties with respect to transactions already completed.’”⁵⁵ Hughes quoted this same standard in its Petition, and observed that “[b]idders in the NY Program auction entered into contractual commitments with New York State with regard to their ability to perform under New York and FCC rules.”⁵⁶ The *Metrics Order* would plainly impose “new duties” on these “transactions already completed” and would “impair rights” to rely on listening tests per the P.800 standard that NY Program bidders “possessed when [they] acted” by bidding in the NY auction.

⁵³ *Sprint Corp. v. F.C.C.*, 315 F.3d 369, 374 (D.C. Cir. 2003) (“[W]hen an agency changes the rules of the game—such that one source ... must assume additional obligations ...—more than a clarification has occurred.”).

⁵⁴ *Id.* at 7-8,

⁵⁵ *Id.* at 7, quoting *Durable Manufacturing Co. v. U.S. Dept. of Labor*, 578 F.3d 497 (7th Cir. 2009).

⁵⁶ Hughes Petition at 6.

Specifically, the *Metrics Order*'s changes to the P.800 protocol would call into question whether Hughes can satisfy the requirements that it assumed by bidding in the New York auction, or at minimum make Hughes's compliance with the rules more expensive, and thus retroactively encumbering the rights that Hughes won at auction.

ADTRAN ignores that Hughes satisfies the letter of the test, and instead focuses on the qualification that the unlawful retroactivity determination is “informed by considerations of notice, reliance, and settled expectations.”⁵⁷ Even if these “considerations” could be found to swallow the broader test, they favor Hughes in this case. As discussed in detail in Section I, above, at the time of the NY Program auction, bidders including Hughes had no reasonable notice that the parameters of the P.800 framework might be changed. The Commission had stated that the P.800 protocol, which includes the listening-opinion test, was the relevant testing procedure.⁵⁸ ADTRAN's proposal that the procedure for establishing the MOS score should be changed was simply that—a proposal, with no force of law.⁵⁹ On these facts, “considerations of notice, reliance, and settled expectations” militate strongly in favor of finding that the *Metrics Order*'s modification of the P.800 protocol would be unlawfully retroactive as to participants in the NY Program auction.

ADTRAN's purported enthusiasm for notions of notice, reliance, and settled expectations is also undermined by its own support for modifications to the latency testing standards proposed

⁵⁷ ADTRAN Comments at 7-8.

⁵⁸ See *supra* Section I.

⁵⁹ See 47 C.F.R. § 1.429(k); see also *supra* Section I (discussing how ADTRAN's proposal appeared doomed given that a well-established ITU-T methodology predicts that satellite networks can come close to, but not actually achieve, a MOS score of 4.0 using the conversation-opinion test, and the Commission had made clear that satellite providers had to be allowed to participate in the NY Program).

by Viasat after the commencement of bidding in the nationwide CAF-II auction.⁶⁰ ADTRAN effectively argues that Hughes, as a participant in the NY Program auction, should be held to latency testing standards that were *not yet established* at the time it placed its bids, while Viasat, as a participant in the nationwide CAF-II auction, should be released from latency testing standards that were *clearly established* before its auction even began. Neither result can be countenanced as reasonable or lawful.

V. CONCLUSION

In order to protect important values of certainty underlying bidding in competitive support auctions, the Commission must grant Hughes's requested clarification that the *Metrics Order*'s modification to the ITU-T P.800 testing protocols do not apply to the NY Program auction, which was long concluded when the *Metrics Order* was adopted, and deny Viasat's petition to modify other aspects of latency testing for participants in the nationwide CAF Phase II auction. Granting Hughes's Petition is also required by the APA and basic principles of agency decision-making and due process.

Respectfully submitted,

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⁶⁰ ADTRAN Comments at 8-9.